UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/749,615	FREY ET AL.
	Examiner	Art Unit	
	MATTHEW S. LINDSEY	4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *30 December 2003*.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-30* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-30* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *30 December 2003* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-30 are pending in this application.

Drawings

2.   The drawings are objected to because Figure 5 contains two "Start" blocks instead of a Start and an End block.

3.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 5, object 500.

4.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 504 ([0041], page 18, line 5), and 504 in the heading of [0056])

5.   The drawings are objected to because Figure 5's reference numbers appear to be off by one number when comparing the drawing and specification. Figure 5 contains steps 500-503, where the specification discloses steps 501-504 ([0041], page 18, lines 2-5). The numbers in the specification are also used in the headings for: [0045] on page 19, [0050] on page 21, [0053] on page 22, and [0056] on page 23.

6.   Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in

reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

7.   Claims 7, 8, 16, 17, 19, 26 and 27 are objected to because of the following

informalities:

8.   With respect to Claims 7 and 16, "if the severity value associated with the trace

message" (line 5), there is insufficient antecedent basis for "the trace message". For

the purposes of examination "the trace message" will be treated as "the log message" in

claims 7 and 16.

9.   With respect to Claims 8, 17, and 27, there is insufficient antecedent basis for:

"the log message" (line 2).

10.   With respect to Claim 19, there is insufficient antecedent basis for: "the defined

severity level" (line 2), and "the minimum severity level and the maximum severity level"

(line 8).

11.   With respect to Claim 26, there is insufficient antecedent basis for: "the trace

message" (line 2), for the purposes of examination "the trace message" will be treated

as "the log message" in claim 26.

12.   With respect to Claim 27, there is insufficient antecedent basis for: "the log

message" (line 2).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

14.   Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Shah (Pub. No: US 2003/0005173), hereinafter Shah, in view of Ullman et al.

(Patent No: US 7,120,685 B2), hereinafter Ullman.

15.   With respect to Claim 1, Shah discloses: "A method (Abstract, lines 1-2)

comprising: defining a severity level for a first controller ([0050], lines 1-8, and [0054],

lines 5-7, where the severity level is the configuration of the filter, for example the

amount of data passed to handlers from the filter can change based on the filter

configuration and thus the severity level is defined), the first controller processing

messages based on the defined effective severity level ([0050], lines 2-4); the second

controller being a child controller to the first controller in a controller hierarchy ([0059],

lines 3-5); and setting the severity level of the second controller equal to the severity

level of the first controller ([0059], lines 3-7) if the severity level of the first controller is

between the minimum severity level ([0059], lines 7-8, isLogging-false, where no

logging takes place) and the maximum severity level ([0059], second Col., lines 2-4,

isLogging=true, where logging takes place)". Shah does not disclose: "defining a minimum severity level and a maximum severity level with a second controller".

However, Ullman discloses: "defining a minimum severity level and a maximum severity level with a second controller (Abstract, lines 9-15, and Col. 4, lines 15-29, where a maximum level is defined when selective control of message logging, tracing, and filtering of the logger and tracer output are at the maximum level, for example when the frequency of logging is adjusted upward the logging level will increase to its maximum level. During normal operation or after detection of a stop event the frequency of logging may be decreased, for a minimum level)".

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the logging system of Shah with the teachings of Ullman to include support for variable levels of logging. Motivation to combine these references comes from Ullman, "to provide continual monitoring with logging and tracing of all computing system activities is unduly burdensome and adversely impacts performance objectives. Therefore, what is provided is a variable logging frequency monitor feature which implements selective control of the message logging, the tracing, and of the filtering of the logger and tracer output (Col. 4, lines 12-18)". Therefore by combining the logging system of Shah with the variable levels of logging of Ullman, one can save performance while still logging relevant events on a computing system.

16.   With respect to Claim 10, Shah discloses: "A method (Abstract, lines 1-2) comprising: defining an severity level for a first controller ([0050], lines 1-4, and [0054],

lines 5-7, where the severity level is the configuration of the filter, for example the

amount of data passed to handlers from the filter can change based on the filter

configuration and thus the severity level is defined), the first controller processing

messages based on the defined severity level ([0050], lines 2-4); the second controller

being a child controller to the first controller in a defined controller hierarchy ([0059],

lines 3-5); and setting the severity of the second controller equal to the minimum

severity level if the severity level of the first controller is relatively lower than the defined

minimum severity level ([0059], lines 7-8, and second Col., lines 1-4, where the parent

node, object 601 in Figure 6, has no logging, which is lower than the minimum defined

logging level for the child node, object 602, Figure 6, which has logging set to true. The

parent level is relatively lower than the child minimum level, and the child overrides the

parent value) and setting the severity of the second controller equal to the maximum

severity level if the severity level of the first controller is relatively higher than the

defined maximum severity level (As seen in the rejection of the previous limitation, the

child does not have to inherit the value of the parent, so it is conceivable that the parent

has logging set to true and the child has logging set to false, which would mean the

parent has a higher logging lever than the child, and the child will use its lower level

rather than inherit the parent value)". Shah does not disclose: "defining a minimum

severity level and a maximum severity level with a second controller".

However, Ullman discloses: "defining a minimum severity level and a maximum

severity level with a second controller (Abstract, lines 9-15, and Col. 4, lines 15-29,

where a maximum level is defined when selective control of message logging, tracing,

and filtering of the logger and tracer output are at the maximum level, for example when

the frequency of logging is adjusted upward the logging level will increase to its

maximum level. During normal operation or after detection of a stop event the

frequency of logging may be decreased, for a minimum level)".

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the logging system of Shah with the teachings of Ullman to include

support for variable levels of logging. Motivation to combine these references comes

from Ullman, "to provide continual monitoring with logging and tracing of all computing

system activities is unduly burdensome and adversely impacts performance objectives.

Therefore, what is provided is a variable logging frequency monitor feature which

implements selective control of the message logging, the tracing, and of the filtering of

the logger and tracer output (Col. 4, lines 12-18)". Therefore by combining the logging

system of Shah with the variable levels of logging of Ullman, one can save performance

while still logging relevant events on a computing system.

17.   With respect to Claim 19, Shah discloses: "A system (Abstract, lines 1-2)

comprising: a first controller ([0050], lines 1-4) to process messages based on the

defined severity level ([0050], lines 2-4, and [0054], lines 5-7, where the severity level is

the configuration of the filter, for example the amount of data passed to handlers from

the filter can change based on the filter configuration and thus the severity level is

defined); and a second controller being a child controller to the first controller in a

defined controller hierarchy ([0059], lines 3-5); and severity generation logic to set the

severity of the second controller equal to the severity of the first controller ([0059], lines

3-7) if the severity level of the first controller is between the minimum severity level

([0059], lines 7-8, isLogging-false, where no logging takes place) and the maximum

severity level ([0059], second Col., lines 2-4, isLogging=true, where logging takes

place)".

18.   With respect to Claim 28, Shah discloses: "An article of manufacture having

program code stored thereon (Abstract, lines 1-2) which, when executed by a machine

cause the machine to perform the operations of: defining a severity level for a first

controller ([0050], lines 1-4, and [0054], lines 5-7, where the severity level is the

configuration of the filter, for example the amount of data passed to handlers from the

filter can change based on the filter configuration and thus the severity level is defined),

the first controller processing messages based on the defined effective severity level

([0050], lines 2-4); the second controller being a child controller to the first controller in a

controller hierarchy ([0059], lines 3-5); and setting the severity level of the second

controller equal to the severity level of the first controller ([0059], lines 3-7) if the severity

level of the first controller is between the minimum severity level ([0059], lines 7-8,

isLogging-false, where no logging takes place) and the maximum severity level ([0059],

second Col., lines 2-4, isLogging=true, where logging takes place)". Shah does not

disclose: "defining a minimum severity level and a maximum severity level with a

second controller".

However, Ullman discloses: "defining a minimum severity level and a maximum severity level with a second controller (Abstract, lines 9-15, and Col. 4, lines 15-29, where a maximum level is defined when selective control of message logging, tracing, and filtering of the logger and tracer output are at the maximum level, for example when the frequency of logging is adjusted upward the logging level will increase to its maximum level. During normal operation or after detection of a stop event the frequency of logging may be decreased, for a minimum level)".

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the logging system of Shah with the teachings of Ullman to include support for variable levels of logging. Motivation to combine these references comes from Ullman, "to provide continual monitoring with logging and tracing of all computing system activities is unduly burdensome and adversely impacts performance objectives. Therefore, what is provided is a variable logging frequency monitor feature which implements selective control of the message logging, the tracing, and of the filtering of the logger and tracer output (Col. 4, lines 12-18)". Therefore by combining the logging system of Shah with the variable levels of logging of Ullman, one can save performance while still logging relevant events on a computing system.

19.   With respect to Claims 2, 20 and 29, Shah discloses: "setting the severity level of the second controller equal to the minimum severity level if the severity level of the first controller is relatively lower than the defined minimum severity level ([0059], lines 7-8, and second Col., lines 1-4, where the parent node, object 601 in Figure 6, has no

logging, which is lower than the minimum defined logging level for the child node, object

602, Figure 6, which has logging set to true. The parent level is relatively lower than the

child minimum level, and the child overrides the parent value)".

20.   With respect to Claim 11, Shah discloses: "The method as in claim 10 further

comprising: setting the severity of the second controller equal to the severity of the first

controller ([0059], lines 3-7) if the severity level of the first controller is between the

minimum severity level ([0059], lines 7-8, isLogging-false, where no logging takes place)

and the maximum severity level ([0059], second Col., lines 2-4, isLogging=true, where

logging takes place)".

21.   With respect to Claims 3, 12, 21 and 30, Shah discloses: "setting the severity

level of the second controller equal to the maximum severity level if the severity level of

the first controller is relatively higher than the defined maximum severity level (As seen

in the rejection of Claim 2 above, the child does not have to inherit the value of the

parent, so it is conceivable that the parent has logging set to true and the child has

logging set to false, which would mean the parent has a higher logging lever than the

child, and the child will use its lower level rather than inherit the parent value)".

22.   With respect to Claims 4, 13 and 22, Shah discloses: "further comprising:

receiving a trace message directed at the second controller ([0042], lines 2-4, and

Figure 6, object 601, being the trace logger); comparing a severity value associated with

the trace message with the severity level of the second controller ([0050], lines 1-2 and

6-8); and processing the trace message if the severity value associated with the trace

message is greater than or equal to the severity level of the second controller ([0050],

lines 2-4).

23.   With respect to Claims 5, 14 and 23, Shah discloses: "wherein processing

comprises formatting information contained in the trace message ([0051], lines 1-2) and

forwarding the formatted information to a specified output destination ([0043], lines 1-

5)".

24.   With respect to Claims 6, 15 and 24, Shah discloses: "wherein the trace

message is emitted in response to the execution of a specified area of program code

within an application ([0042], lines 6 and second Col., lines 1-6)".

25.   With respect to Claims 7, 16 and 25, Shah discloses: "further comprising:

receiving a log message directed at the second controller ([0042], lines 2-3); comparing

a severity value associated with the log message with the severity level of the second

controller ([0050], lines 1-2, and 6-8); and processing the log message if the severity

value associated with the trace message is greater than or equal to the severity level of

the second controller ([0050], lines 2-4)".

26.   With respect to Claims 8, 17 and 26, Shah discloses: "wherein processing

comprises formatting information contained in the log message ([0051], lines 1-2) and

forwarding the formatted information to a specified output destination ([0043], lines 1-

5)".

27.   With respect to Claims 9, 18 and 27, Shah discloses: "wherein the second

controller is associated with a particular category ([0042], lines 4-5) and wherein the log

message is from an application and/or network component associated with the category

([0042], lines 4-5)".

Conclusion

28.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

        a.   Edwards (Patent No: US 6,539,501 B1) teaches logging information

        including severity levels.

        b.   Josyula et al. (Pub No: US 2004/0028059 A1) teaches distributed logging

        and tracing information.

        c.   Saini et al. (Patent No: US 7,174,370 B1) teaches networked monitoring.

        d.   Camp et al. (Patent No: US 6,802,067 B1) teaches message logging

        framework using classes for different functions.

e.   Nock (Patent No: US 6,144,967) teaches an object oriented framework for

analyzing logs.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MATTHEW S. LINDSEY whose telephone number is

(571)270-3811. The examiner can normally be reached on Mon-Thurs 7:30-5, Alternate

Fridays 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSL
1/14/2008

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